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ABSTRACT

This paper describes a model for individualized instruction, in which instruction is seen as a flexible series of interactions between three factors: the student, the content, and the strategy for teaching. The model is based on the student's active involvement in the content and on the teacher's facilitation of student learning. The paper shows how consideration of the three factors--student, content, and strategy--may result in at least three different teaching modifications for each factor. Considerations of each student's degree of socialization and independence may be reflected in the ways in which students are grouped: they may work alone, in pairs or small groups, or in large groups. Content may be adapted according to the degree of abstraction possible for each student, according to students' perceptual strengths and weaknesses, and according to students' interests and experiences. Strategy may take the form of personal contracts between teacher and student, use of media, or use of lectures. The paper presents the background of the model, shows how to diagnose a student's knowledge before beginning a new subject, and indicates how the model may be applied to the teaching of "Macbeth." Five worksheets to facilitate the study of "Macbeth" are appended. (GW)

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One key to individualized instruction of MACBETH or anything else is systematic application of a teaching structure that has built-in provisions for natural acceptance of flexibility.

Such flexibility can be achieved with the model of individualization described below which utilizes a 3 x 3 interrelationship of modifications in 1)student deployment, 2) content matter, and 3) strategies of presentation.

This model, derived from a combination of 15-years teaching experience and years of effort to translate journal articles into practice, provides recognition for differences while preserving full curricular requirements. I have called it "S-C-S." (Not "S.O.S." the call for help with zero in the middle.) Content, what the student is to learn, is our central subject. But just as I no longer teach BEOWULF (I have decided after all these years that I really teach students... to read BEOWULF), emphasis today has shifted from"how to teach" content to

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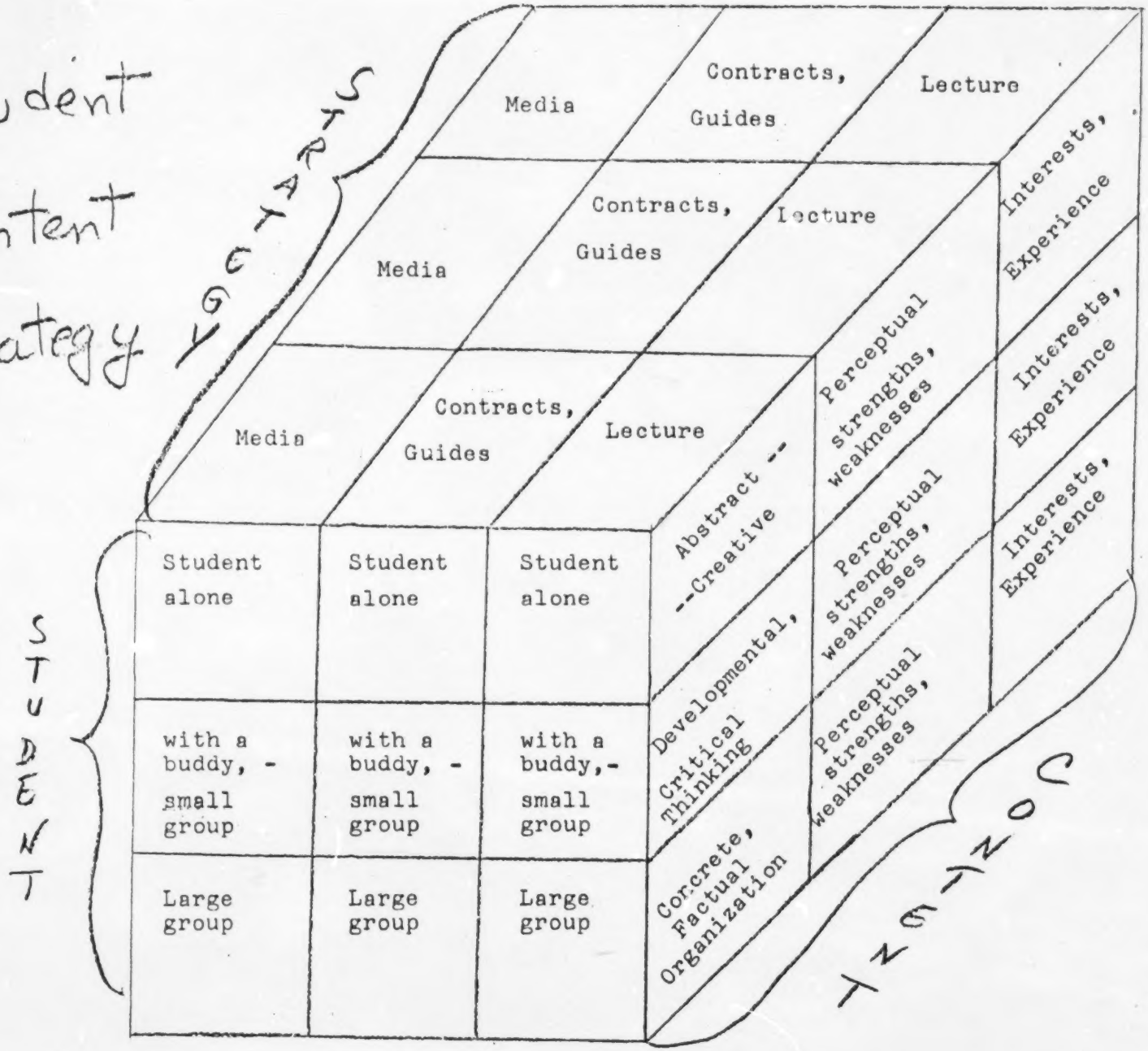
Figure 1.

Student Content Strategy



Beatrice G. Leffert 1976

"how we learn." The teacher has become the facilitator, midwife to the student's learning, and the learning process is now seen as a lifetime process, one that is portable, adaptable, personal, and efficient; learning must conform to the permutations of new subject matter and the continuing maturation of the student.

To keep subject matter in the middle, bolstered by varied student arrangements and by varied approaches, requires a continuous synergistic balance. The instructor must know the subject well, believe in developmental growth, have a store of varied materials or help with them, and, - above all - must be supported in creative freedom by the school system. Trust from the administration is essential.

BACKGROUND OF THE S-C-S THREE-BY-THREE MODEL (Figure 1.)

The developmental aspects of the S-C-S model were largely influenced by Piaget's (16) propositions that:

1. Maturity in verbal understanding changes the quality, not the quantity, of thinking,
2. The act of assimilating new knowledge is through adaptation of the <u>new</u> to <u>prior</u> schema,
3. Learning takes place through involvement.

As we grow older, we express ourselves differently, in congruence with accumulated experience, needs, and outlook. Erikson (6) stated that personality, in any culture, develops through a common sequence which responds in interaction with persons and institutions in a

widening radius. Because these changes are natural and inevitable, teaching must adjust to them or be psychologically invalid. Therefore, the teacher must be able to judge where, on the continuum, a particular student is at that stage in education.

Johnson (11), in an extensive review of research dealing with analysis of meaning in relation to complex learning, concluded that the type, relevance, and organization of associations may be more important in full comprehension of meaning than quantity can be. Prior learning shapes the future.

Learning's cumulative effect suggests the importance of continuing flexibility in diagnosis and prescription. Going through all the difficulties of a major testing plan and then operating on the assumption that a student has absolutely this or that "cognitive style," is fraught with disaster.... if the "cognitive style" is not reassessed within a reasonable time. In all cases, are we allowing for changes in life experience? True individualization of MACBETH or anything else, must be adapted, <u>in situ</u>, to the current developmental stage of the learner, be culturally assimilable, and require active participation.

Teachers, therefore, need informal diagnostic devices to be administered more frequently, need time to prepare materials, need conference time with students, and encouragement to study further developments in learning theory.

DESCRIPTION OF THE S-C-S THREE-BY-THREE MODEL (Figure 1)

S-C-S stands for:

1. Strategy (upper left margin) - the presentation; the channels through information is conveyed.
2. Content (lower right margin) - the cognitive and emotional processes inherent in subject matter-student involvement.
3. Student (lower left margin) - the degree of socialization and independence chosen for a learning situation.

At any time after the initial diagnosis, the teacher may modify each of the above factors. The dynamic process begins with diagnosis of the student's immediate stage of knowledge, abilities, and needs, continues to analysis of the task, then to choice of strategy, then involvement. After evaluation, the cycle continues.

Creative application of the S-C-S, supporting achievement by all levels of children and adults on an individual basis, gives special recognition to the gifted. Isaacs (9) noted that gifted children are often neglected on the assumption that they don't need extra help or are doing too well already. Furthermore, a certain type of teacher may be more effective with a certain type of student characteristic.(4) The units designed by teachers may be less efficient than the divisions made by the students. (3) Even though learning may appear to have been successful, it may deteriorate in a short time if not assimilated with and compatible with prior learning. (18)

General learning theory supports the view that individualization of studies to take into consideration myriad factors would be desirable.

DIAGNOSIS

Testing and evaluation of a student's prior knowledge,

cognitive and emotional characteristics, and physical strengths and weaknesses, may take place through standardized tests or teacher-made tests, at the beginning and throughout the learning process, and should be a matter of discussion between the teacher and student. Status is not as important as assessment-and-needs analysis.

In preparation for a study of MACBETH, the following information would be needed for each student:

1. Standardized test scores, if available - give some comparison of the student's test scores with peers'.
2. Informal test results on teachermade tests - literary content:
   a. Pre-test of knowledge of play structure, Shakespeare, literary terms.
   b. Pre-test of vocabulary used in the play.
3. Personal inventory derived from questionnaire-questions include explanation of a proverb, definitions of common words, reasons for studying this subject, and include:
   a. If you have difficulty in reading an assignment, what do you do?
   b. How do you prepare for tests? On a test, what do you do first?
   c. What jobs have you had? (paid and unpaid)
   d. What part of the newspaper do you read first?
   e. What is your favorite TV program?
   f. If you had a million dollars, what would you do?
   g. What hobbies and sports do you like?
   h. Do you play a musical instrument? Paint? Draw?
   i. What do you think is the greatest problem facin g the world today? (State briefly.)
4. Personal reactions derived from Draw-A-Man trial sketch.
5. Linguistic competence derived from
   a. Wide Range Achievement Spelling Test by Jastak et al. (10).
   b. Connectives Test, from Watts's study of maturity(17).
   c. Explanation of a recipe or process.

NONE of these tests alone can give a true assessment of the student's abilities and needs. Also, they must be supplemented with physical tests - visual and aural screening by the school nurse. Furthermore, not all students will need all tests. For example, the WRAT Spelling Test, which is a helpful indicator of memory and ear for sounds would be given only if other instruments show a need for it.

The student's reaction to any one of these personal tests is ONLY an indicator, to be viewed in the light of all the other indicators, and subject to revision.

The student's scores on the standardized tests are also ONLY a point of comparison - comparison between subtests (If high on vocabulary, why low on math problems?) and between whole scores (If ranked at 84th percentile in the fifth grade, what happened that made it 60th percentile in the eighth grade?).

And this writer uses the sketches resulting from the Draw-A-Man activity only as a tentative clue towards understanding a student's thinking.

In fact, they are mere clues which must be considered creatively by the teacher in assessment in interaction. Even the factual answers to pre-tests of knowledge of material in the unit are subject to interpretation. Was syntax an impediment in the vocabulary sample sentences?

Important questions to be considered in general diagnosis in preparation for literary study might be limited to:

1. Can the student answer 45% - 50% of cloze questions in books he is to read independently?
2. What prior learning might interfere with present learning?
3. What prior learning might facilitate present learning?
4. What level of cognitive development would be best in entering this subject, at this time, for this student?
5. What emotional associations does the student manifest with regard to this subject?

The teacher's experience and observation give meaning to assessment hypotheses. The answers to questions 1 - 5 above are derived from the total evaluation of formal and informal instruments.

STRATEGY

Strategy, the presentation channel, could be a form of:

1. media - movies, film strips, videotapes, cassette tapes;
2. personal contracts drawn up between teacher and student, accompanied by learning packages, study guides, bibliographies, examples of desired results, and assignment sheets. (See pp. 12-14, Worksheet Samples) The amount of credit is declared in advance. Assignments are prepared at different levels of thinking
3. lecture - given by teacher or student to an audience of one or more. Phillips (15) pointed out that older students at different developmental levels differ in the amount of "telling" that they can use. On the other hand, students who are uncertain or new in the subject appreciate a judicious amount of lecture.

In this writer's MACBETH lessons, lecture was frequently used to launch a unit as well as for review. Length-of-lecture strategy is another variable to be considered.

CONTENT

One purpose of instruction is to reduce the distance between the content and the student found in degree of abstraction (12). An aspect of this distance is the degree to which the student can visualize from abstract materials and/or synthesize concepts. MACBETH, for example, can be read as a fascinating narrative of ambition and defeat, with concrete examples that relate to personal and universal experiences(indecision, influence of his wife, jealousy of Banquo, overweening ambition, ruthless actions culminating in murder of innocents, and final defeat). On a more abstract level, it can be discussed as an example of Aristotelian tragedy or even as a lesson in political management.

Important to individualization, however, is the recognition that the ability to think abstractly appears to have no relation to the ability to speak the language or even read the play. A distinction can be made between students who can "handle" the content

and those who can read it independently. Figure 2 is an example of the response of a "learning disabled" student in the tenth grade to the "Tomorrow, and tomorrow, and tomorrow speech." Though the spelling is barely decipherable, the ideas are unmistakable.

Whether the student can discuss content on the concrete operations level or in a more advanced way would have been observed in the responses given in the diagnosis. Learning packages should contain materials on a variety of levels, requiring students to begin with concrete details, then proceeding to interpretive and application levels if possible. Figure 3 presents an example of structured material on a concrete level.

This writer believes that there are few content materials that cannot be mastered, eventually, by anyone. The interaction of a human personality and a selection of literature may make for difficulties in some cases (1) and actual experience may not always be wise or feasible in certain subject areas. . However, the list of research topics (figure 4) can result in learning on the three levels of literal, interpretive, and applied learning delineated by Herber (8). The reactions produced as "projects" by the students will reflect their optimum levels of intensive thinking.

Content is not so much changed as the "packaging" of it is. A fundamental decision must be made in this connection. Are we concerned with what Guthrie (7) called "information gain" or with reading practice? If learnability is impeded by syntactic complexity, then certain content materials should be presented in simpler forms. This, of course, might destroy the aesthetic fabric of fine literature (absolutely wrecking MACBETH) so other ways should be found to overcome readability difficulties.

A "hands-on" approach may bring content into manageable parameters. As is noted in the Thirty-fourth Yearbook of the National Council of Teachers of Mathematics (13), the first English translation of Euclid in 1570 presented pasted-on pop-up models. The equivalent in literature is personal involvement.

Personal involvement in the ideas, literary forms, emotional tensions, and applications of the play to modern life can be drawn from MACBETH as from any other topic. Dunn and Dunn (5) have presented excellent examples of activity packages which suit school subjects. Some activities which this writer has found successful are:

1. Choose a line from the play. Clip a picture from a magazine or newspaper advertisement that uses the meaning of the quotation in another way.
2. Choose one of the themes we have developed in discussion; find a current news story that might be said to illustrate the same idea.
3. Put yourself in the place of one of the main characters. Explain what you would have done in that situation.
4. Choose a passage to memorize and videotape your enactment of it.
5. Prepare a blueprint rendering of the setting for one of the scenes showing furniture and position of figures.
6. Prepare a sculpture or sketch of one of the characters in the play. Explain why you chose this character.
7. Prepare a bulletin board giving an explanation of one or more terms used in discussion such as exposition, tragedy, rising action, etc. Treatment may be serious or humorous.
8. Make up a "playbill", giving information about the author, actors, scenes, history.
9. Write a review of the play as though it first opened.
10. Choose a modern era in which the play could be placed. Explain why the characters would be suitable and what changes would be needed.
11. Write an editorial for a newspaper of Macbeth's era.
12. Write an imaginary diary entry for a few important days in the life of a major character.

These activities, hovering on and around the actual work,

serve the purpose of enlisting students' concern, involving them in some practice, within their abilities, that might encourage cognitive growth. Three sets of skills which Burton (1) described as needed for this aspect of reading are in the areas of:

1. Abilities needed for imaginative entry into a work of literature.
2. Abilities needed for perception of meaning or central purpose.
3. Abilities needed for perception of artistic unity and significance.

Our concern is to manage content analysis in such a way as to promote development of these skills. Creative reactions (acting, making costumes, writing poetry, writing critiques, artwork, constructions are vehicles for content rehearsal and interaction. The object of re-allocation of subject matter, adjusting the time, size of step, pacing, and application of it is an attempt to apply learning theory to classroom management. The active learner appears to learn better than the passive learner, possibly because action results in improvement in relating new material to existing ideas.(11)

PERCEPTUAL STRENGTHS AND WEAKNESSES

Alternate assignments, personalized pacing, and recognized kinesthetic activities are a normal part of an S-C-S MACBETH unit. After visual and auditory screening, language deficits having been observed in written work, students can naturally be assisted in selection of appropriate activities. These might include hearing the play on records or tapes instead of reading it, seeing films, discussing each lesson with an assigned "buddy," using easier books from the school library.

Since a natural activity is to bring a cart-load of books from the library for research, inclusion of various types and levels of books is unobtrusive.

INTERESTS AND EXPERIENCES

It might be said that adolescents have a limited range of experiences and they often are hard put to describe their "interests."

Yet, students are interested in personal relationships and in activities associated with their daily routines as well as with personalities they have seen in movies and on television.

Adults appear to have occupation-related interests associated with the roles they assume in daily life, also. Payette (14) suggested that the affective factors of cognition might be enlisted in learning by changing the mode of questions.

By incorporating the student's interest into social studies questions, for example, Payette would ask the following:

1. What does this term mean to you?
2. How would you define this term?
3. What do you think caused this event?
4. What explanation do you have for the result?
5. Why do you think this happened?
6. How do you justify this choice?
7. Why do you prefer this consequence?
8. How do you know that this conclusion follows necessarily from these reasons?
9. How do you know this statement is true?
10. How would you test this hunch?

Noting students' interests and respecting them gives opportunities for learning which permit students to take responsibilities. Students have the freedom of choice which makes the subject meaningful and requires attention. One might decide which lines to memorize or illustrate, which actresses to study, which books are best, which associates to work with, which style of activity to present, even what kind of evaluation to ask for.

The problem of incorporating the student's experience into the learning process often reaches an impasse on the question of using one of a bilingual student's languages. The psychology pf involvement and acceptance of the individual clearly indicates the importance of learning in one's native language. On the other hand, student's growth in secondary and adult learning may require that internalization of another language take place. While one language could not be said to be better than any other since all express ideas and emotions (2) some have a more explicit vocabulary or a

larger body of standardized printed material. Local schools must make an appropriate judgment on which languages to teach at certain levels.

STUDENT-DEGREE OF SOCIALIZATION

Peer grouping is a logical effect. The need to compare ideas, to receive assurance, to ask for explanations, to satisfy curiosity, to ask peers for help, to rehearse ideas, to think out loud, to refine concepts in discussion appears to lend support to some degree of friendly grouping.

Size of the group is determined by the teacher in consultation with students with regard to the kind of assignment, the subject matter, and the psychology of the situation. The size may be temporary, since the group may dissolve or exchange members with another. For a scene from a play, three people may be necessary, but only one might work on writing it. A videotape may be more efficient with two students, but may borrow a cameraman for a time.

A peer "tutor" would necessitate a private grouping, but a symposium discussing whether Lady Macbeth was really an evil force may require five speakers. In most cases, students themselves might decide the size of their group.

CONCLUSIONS

In the STRATEGY-CONTENT-STUDENT model of individualization, the teacher is seen as a facilitator who advises and directs the student, analyzes the variables involved in subject matter, and has, as a major goal, the development of student responsibility for learning. A unit based on MACBETH or anything else would emphasize the process of gaining self-knowledge and lifelong habits of study that will be portable and adaptable in our rapidly changing world.

Universal factors of accelerated change (mobility of populations, shift from traditional occupations, availability and standardization of print-materials, longer life-span, growth of urban centers, change in women's status, ready access to mass media) will continue to modify and individualize differences among the students we find before us. Three modes up and three modes down, interjoining into at least nine, may provide a framework for coping with diversity.

Worksheet - MACBETH

Assignment: Review of fundamental social and moral question regarding MACBETH and Elizabethan society. (From difficult level learning package). Requires transfer from abstract to concrete detail for corroboration of inferences.)

Directions:

Read the following critique. In the column next to the passage, cite lines from the play to support three or more of the comments in this passage. Before you begin, discuss the meaning of the underlined words with your partner, and arrive at a clear meaning of the critique.

CRITIQUE	QUOTATION	ACT
"The social order, presided over by the monarch, was seen to be a part of the cosmic order; and the social order was maintained within itself by law, including moral law, as part of universal law. Macbeth's crime was that he violated moral and social law, and so, cosmic law and order. True, he had supernatural incitement and his wife's allied urge in wrongdoing, an urge so great that she herself could have done the deed, but for Duncan's likeness, as he slept, to her father."		

From: Wickham, G.W.G "Introduction to MACBETH", The London Shakespeare, ed. John Munro, New York, Simon and Schuster, 1958.

Worksheet - MACBETH

Assignment: Application of reading skills of recognizing
a. characterization through dialogue,
b. development of paragraph or logical structure.

Directions:

For each quotation, give the speaker's name, tell what clues helped you recognize the speaker, tell whether the phrase came at the beginning, middle, or end of a speech.

Quotation	Clues	Position of phrase
1. I fear thou playst most foully for it...		
2. In the catalog you go for men...		
3. This is the very painting of your fear...		
4. But screw your courage to the sticking place...		
5. ...have we eaten the insane root?...		
6. What man dare, I dare.		
7. Canst thou not minister to a mind diseased?...		
8. Whither should I fly?		
9. So fair and foul a day I have not seen...		
10. I 'gin to be aweary of the sun...		

Worksheet- MACBETH

Example of simplification of explanation of "tragedy."

(After lecture and discussion, slower students were required to include this worksheet in their MACBETH notes.)

.....

Directions: I.Fill-in.
II.Write paragraph

I. Aristotle, who lived in (country)..... in the .....century, was a ..... . He wrote a book called .....which described a theory of play construction called the theory of ..... In his theory, Aristotle said that a real tragedy had the following four elements:

1.....
2.....
3.....
4.....

To bring this theory up-to-date, which of these four elements would you change? Why?

II. Write a paragraph (50-100 words) that shows how the character of Macbeth fits the definition of a tragic hero.

Figure 3.

RESEARCH PROJECT PROGRAM REPORT

TOPIC: .....

STUDENTS: 1. .....
2. .....

DATE OF PRESENTATION: .....

EQUIPMENT NEEDED: .....
.....
.....
.....

Worksheet - MACBETH

TOPICS: RESEARCH PROJECTS

Directions: Choose one of the following topics.
*You will prepare a 3 to 5 minute oral presentation that will be interesting and could be in the form of a speech, a videotape, a debate, a playlet, a song, a demonstration of how-to-do something, art show, etc.
*You will hand in a two-page written report plus a bibliography showing at least three separate sources in correct bibliography form.
*Give your opinions based on the information you've found.

1. Did Bacon write Shakespeare's plays?
2. Did Marlowe write Shakespeare's plays?
3. What records do we have to prove that there really was a person named Shakespeare?
4. What kinds of costumes were used for MACBETH? Where were costumes obtained?
5. Were there any famous actors in Shakespeare's time? Who?
6. What costumes did ordinary people wear at this time?
7. What was the world situation as Americans and Englishmen in Shakespeare's times would have seen it?
8. Describe the personality and accomplishments of Queen Elizabeth I?
9. What was the state of medicine in Shakespeare's lifetime?
10. What types of architecture were popular in this period?
11. What art and artists belong to this period? (England? France? Italy?)
12. What other forms of entertainment were popular?
13. What kinds of music were popular?
14. Describe Shakespeare's coat-of-arms and explain how he obtained it.
15. Did the Elizabethans believe in witchcraft? How did this affect their everyday lives?
16. Did Shakespeare use any original sources for the story of MACBETH? Explain why you think he did or didn't. Cite your research.
17. Do you think the women's roles in MACBETH show anything about the role of women in Elizabethan life? Explain. Cite research.
18. Describe the English army or navy of the period. Is this type of army or navy shown in the play?
19. What do you think the play says about government in general and Elizabethan government in particular?
20. What was the attitude of the colonial Americans towards Shakespeare's plays? Why did they feel this way?

Figure 4.

Figure 2.
Composition by a Learning Disabled Student
(10th grade)

In the play macbeth a man who is close to death is a man who makes an analigy of /his life & life in genrial. He said in the openning of the paragraph "Tomorrow, and tomorrow and Fomorrow Creeps in this petty pace from day to day." This means that life was all a Such a nothing. then the paragraph it go on to say that every one is a fool & scince he has failed to do what he wanted then every one is a failery.

My View of life

My View of life: Is that after life comes life. I say this bacause we have to extend ower knologe by when you have larned all we will we die then /we practis tbis knologe.

(Typed copy exactly from the original)

Figure 2.

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